OKLAHOMA

CURRENT FARM ECONOMICS

Vol. 23, No. 2 April, 1950

Efficient Management and Green Bug Infestation.

(See Page 48.)

Steer Prices by Classes and Grades, Oklahoma City, 1940-1950.

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Who Owns the Mineral Rights in Oilfields?

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THE COVER: K. C. Davis, assistant economist, is the author of "Efficient Management and Green Bug Infestation," page 48, and the Poultry report, page 44. (Another in a series of pictures of Agricultural Economics and Extension division staff members whose reports appear in CURRENT FARM ECONOMICS.)

Current Farm Economics

OKLAHOMA

Vol. 23 | April, 1950 | No. 2

Prepared bi-monthly by the Department of Agricultural Economics and Extension Economists, Oklahoma A. & M. College.
Mailed free upon request.

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Cooperative extension work in agriculture and home economics, Oklahoma Agricultural and Mechanical College and United States Department of Agriculture, cooperating. Distributed in furtherance of Acts of Congress of May 8 and June 30, 1914.

The Agricultural Situation

GENERAL

Demand

Economic activity generally is stable and prices have shown little tendency to change. This favorable situation results from the relatively large industrial production, high construction activity, and strong consumer demand. Most businessmen and consumers are expecting business conditions to continue favorable through the first half of the year; consequently, their actions and decisions will tend to strengthen and stabilize the general price level during the next two months.

For the remainder of 1950, the effects of several factors must be considered. The coal strike has been settled, but the actual and potential strikes in the automobile industry may cause considerable reduction in output and some increased unemployment.

The results from the coal strike indicate that most of the costs of these increased benefits will be passed on to consumers in the form of higher prices. The primary item on the 1950 bargaining table will concern pension plans rather than the usual "cents per hour" wage boosts. Much of the discussion will center around the methods of financing the pension plans, and the extent of company guarantees in view of possible future changes in social security benefits. Apparently pensions will be granted or extended.

Some concern exists about the 4 to 5 million unemployed persons. Under the Employment Act of 1946, the government has committed itself to a policy of full employment. Although no specific plans for attaining this goal were set up, it is anticipated that useful make-work plans may have to be established if unemployment reaches a critical level. Present unemployment is large enough to turn some thinking in the direction of proposing stand-by projects to be used in the event that unemployment turns sharply upward. However, it is not large enough to put those plans into operation. At present, unemployment relative to the total civilian labor force is substantially lower than existed during the years immediately preceding World War II.

Gradually United States exports are approaching prewar patterns in which fewer agricultural food products will find markets abroad at present prices. Compared with 1947, the value of agricultural food exports was down 30 percent in 1949, while the value of agricultural non-food exports was up 71 percent*. Somewhat lower prices, the scarcity of dollars in the importing countries, and the recovery of food production in Western Europe were responsible for a

* *The Demand and Price Situation*, USDA, BAE, February, 1950, page 9.

major portion of this change. At present, indications point to a continuation of the rate of exports established during the latter part of 1949. This will mean a substantial reduction in the value of food exports during 1950.

Although consumer incomes are high, at least a part of the strong consumer demand has been made possible through the increasing amounts of goods and services purchased on various types of credit. Many economists fear that consumers are buying too heavily on installment plans, and, on a dollar basis, installment purchases are very high. However, installment purchases expressed as a percentage of disposable personal income are lower than before the war.

Heavy use of credit also predominates in the purchase of real estate. One factor in favor of the consumer is that most of the loans on real esate are amortized over a period of from 20 to 25 years, and thus will be much easier to repay as compared with the conditions surrounding the real estate boom during the 20's. All things considered, the consumer has not yet overburdened himself with credit on the basis of the present income, and can sustain or possibly increase the rate of credit purchases for a time.

Price

In response to the relatively stable general economic conditions, the demand for agricultural products has remained at about the level of the past few months. In general, agricultural prices have remained quite stable, except for normal seasonal price changes due to marketings, and probably will remain stable during the next two months.

The March 15 index of prices received by farmers in the United States remained unchanged from the previous month at 237 percent of the 1910-14 average.* In contrast, the March 15 revised index of prices paid by farmers (including interest, taxes and wage rates) increased two points to 250 percent of the 1910-14 average. This resulted in a one-point decline in the parity ratio (prices received to prices paid) to 95, as compared with the parity ratio of 101 on March 15, 1949.

Oklahoma prices were somewhat higher. The March 15 index of prices received by Oklahoma farmers increased 6 points to 252 percent of the 1910-14 base, while the index of prices paid by United States farmers, excluding interest and taxes, increased one point to 251 percent of the base. The resulting parity ratio for Oklahoma was 100 as compared with 98 a month ago, and 103 a year ago.

* *Agricultural Prices*, USDA, BAE, March, 1950, page 1.

TABLE 1.—Percentage Changes of March Prices from Prices in Selected Months by Commodity Groups: Oklahoma.

	From March 1949	From February 1950
All commodities	− 5.3	+ 2.4
Total crops	− 5.3	+ 2.7
Grains	+ 0.4	+ 2.7
Cotton and cottonseed	− 8.1	+ 3.5
Miscellaneous crops	− 1.1	− 3.3
Total Livestock and Livestock Products	− 5.6	+ 1.0
Meat animals	− 1.4	+ 1.7
Dairy products	− 5.7	− 1.3
Chickens and eggs	−26.4	+ 3.0

March 15 prices by commodity groups generally were higher than February 15 prices, except for miscellaneous crops and dairy products (Table I). However, total crops contributed more to the increase than did total livestock and livestock products. Individual commodity price movements were mixed within these groups. For example, within the cotton and cottonseed group, the price of cotton increased more than enough to offset the decline in the price of cottonseed. Other commodity groups had similar divergent price movements of its individual commodities.

Compared with a year ago, March 15 prices were down approximately 5 percent. Total crops and total livestock and livestock products contributed almost an equal share to the decrease. The only commodity group showing an increase was grains. The cotton and cottonseed group and the chickens and eggs group showed the largest declines.

Income

Cash receipts from farm marketings are estimated at 5.6 billion dollars during the first quarter of 1950, or down about 5 percent from the same period a year earlier.* Receipts from livestock and livestock products will total about 3.4 billion dollars, while receipts from crops will be approximately 2.2 billion dollars. Lower prices of livestock and livestock products, together with smaller receipts of grains, contributed to the decrease.

Farm operators' realized net income declined 17 percent from 1948 to approximately 13.8 billion dollars in 1949. Gross income and cash receipts each declined about 10 percent, but production expenses declined only 3 percent. It is anticipated that these relationships will hold through 1950, and the realized income of farm operators probably will decline further.—**Leo V. Blakley.**

* *The Farm Income Situation*, USDA, BAE, February, 1950, page 1.

CROPS

Cotton

The majority of evidence indicates that some reduction likely will occur in the rates of domestic cotton consumption within the next few months. The rate of consumption probably will not decline to as low a rate this year as it did from April to July in 1949; consequently, the total may be around 8 and ¾ million bales for the year ending July 31.

Current exports are continuing to exceed the rate for the 1949-50 season. From August 1, 1949, to January 31, 1950, exports totaled 2,413,000 bales compared to 1,885,000 bales in the same period the previous year. Between 4 ½ and 5 million bales likely will be exported this season (August 1, 1949 to July 31, 1950).

Stocks have been rising recently in consuming establishments. Farmers are selling a considerable number of equities. In the first week of March, about 100,000 bales were redeemed from the loan. Equities on short staples and low grades are selling higher than most other qualities.*

The recent amendment will permit limited adjustments in acreage allotments, but will not permit sufficient adjustment to overcome many inequities. Allotted cotton acreages will not be used on a good many farms, while other farmers will have to reduce their cotton acreage severely. The increase in allotted acreage provided by the recent amendment, and a proposal to furnish part of the CCC cotton instead of cash on the ECA program, may weaken the market to loan levels this fall, especially if a high yield is made.

The high boll weevil survival, strong domestic mill demand, and strong export demands together with dry conditions in Texas and Oklahoma, are factors that are strengthening the current and future markets. The relative importance of these factors in the next year remains to be seen. Unless a "shooting" war or extensive rearmament develops, the long-time trend appears likely to be toward lower levels than the current prices, largely on account of (1) some increases in foreign production; (2) substitution of synthetics; (3) reductions in ECA and other assistance; (4) trade restrictions and (5) deflationary forces.—**John D. Campbell.**

Vegetables

Suggested acreages in 1950 were recently announced by the U. S. Department of Agriculture, Production and Marketing Administration, for sweet potatoes, summer and fall vegetables for fresh markets, and truck crops for commercial processing.

* "Weekly Cotton Market Review," USDA, Cotton Branch, Dallas, Texas, March 31, 1950.

The acreage suggested is three percent less than the 1949 summer acreage, three percent less than the 1949 fall acreage, and nine percent less than the 1949 acreage of truck crops for processing.

Oklahoma vegetable growers will be interested in the 1950 percentage change from the 1949 acreage for harvest for the following: Sweet potatoes, 100 percent; summer vegetables for fresh market — snap beans, 95; cabbage, 100; cantaloupes, 100; sweet corn, 90; cucumbers, 96; onions, 100; spinach, 100; tomatoes, 100; watermelons, 95; fall vegetables for fresh market—snap beans, 97; cabbage, 100; spinach, 97; tomatoes, 94; commercial truck crops for processing—snap beans, 94; cucumbers for pickles, 82; spinach, 95; and tomatoes, 100.

Vegetable growers will not have acreage allotments; however, the Department hopes that growers will plant within the suggested acreages, and apply the percentage change feature of the suggested acreage to their individual farms. No acreage increases were suggested for vegetables. The suggested acreages are on a national basis.

The Department of Agriculture does not contemplate a price support program for vegetables in 1950. Price support was provided for sweet potatoes, when such supports were mandatory, and assistance has been given from time to time to truck crop growers in the form of surplus removal operations. However, the Department states no requests for such price supports or assistance will be considered in areas where growers have substantially exceeded the suggested acreage for the commodity.

The suggested vegetable acreage with percentage comparisons may be obtained at the office of the county agricultural agents.—**James R. Enix.**

Wheat

International.—The changes apparent in the exporting and importing areas of the world are having a marked effect in international trade. The international wheat agreement in itself, placed in effect last fall, has been a recognition of surplus wheat areas, as well as deficit food grain areas. The total world bread grain trade for 1949-50 is expected to be about 10 percent or more below 1948-49. Most of the principal surplus-producing areas of the world have supplies available in sufficient quantities to meet expected demand, but significant increases in carryover stocks are expected only in the United States. Such a reduced level of world trade in wheat indicates an improved stock supply situation in nearly all the more important importing countries.

As reported in **Current Farm Economics, June**, 1949, the minimum export price of wheat for the United States under the Interna-

tional Wheat Agreement is $1.50, with a maximum of $1.80 for 1949-50 which will decline 10 cents in each succeeding year.

United States.—An abnormal world demand for bread grains absorbed the excess of domestic needs for wheat during the years 1944-48. Such a situation enabled the United States to minimize the increase in carryover on July 1, 1949.

During the period of 1938-1944, the loan program was probably the most important factor affecting wheat prices. Since the near record crop of 1948, the loan program has again become an important price factor.

Probably the most important strengthening factor in wheat prices at the time of this writing is the continued dry weather and green bug infestation of the winter wheat belt, as contrasted to both the December and February reports which indicated conditions were relatively good. Many areas of the wheat section have had sporadic or spotted, and in some areas quite heavy, damage from green bug infestations. March winds, coupled with the dry weather, have played havoc with many fields of wheat with insufficient cover to prevent soil movement. Surface and subsurface moisture seems just barely adequate in most sections of the wheat belt, and many farmers feel that a good rain is a must before April 15 if they hope to have a crop this year.

If April rains are forthcoming, an estimated 53 million acres of winter wheat seeded plus an estimated 20 million acres of spring wheat seeded would, with yields similar to the past two seasons, result in a total crop of about 1,135 million bushels. Such a crop added to the estimated 390 million carryover would raise supplies close to 1,525 million bushels. If domestic disappearance for next year approaches this year's estimated 700 million bushels, it would leave about 825 million bushels for export and carryover in 1950-51. Even if the United States exports as much next year as is estimated for this year, it would leave the United States with the third largest carryover on record and the largest recorded peace time carryover.—**Kenneth B. Boggs.**

FEED

United States.—The record stocks of feed grains now on hand are more than adequate for domestic and export requirements during the remainder of the feeding season, and another big carryover is in propsect. It is estimated that at the first of the year total stocks of corn, oats, and barley were fully one-third larger than the 1938-42 average, and 3 percent above the previous record stocks of a year earlier.

Prices of most feeds declined during the latter part of last year, and in general feed prices during the first part of this year averaged lower than a year earlier. The indexes of prices received by farmers

for feed grains and wholesale prices of high-protein feeds were 7 percent lower. However, it is expected that prices will not be too much below last year because of the large quantity of feed grains under loan this year and the larger number of livestock on farms.

Feed price levels, although important to the feed producer, are not as important to the livestock producer as the livestock-feed price ratios. In general, the livestock-feed price ratios have not been as favorable to livestock producers the last few months as they were during the 1948-49 feeding season. The hog-corn price ratio, based on average prices received by farmers, was 13.1 in mid-January, a little above the long-term average, but lower than the very favorable ratio of a year earlier. The milk-feed price ratio was a little above average in January, but it also was lower than a year ago. Because of the much greater decline in prices of eggs and chickens than in the price of poultry feeds, the egg-feed and the chicken-feed price ratios in January were much lower than a year ago and well below average.

Livestock-feed price ratios are expected to continue less favorable to livestock and poultry producers during the remainder of the 1949-50 season than in the same period of 1948-49, reflecting the somewhat lower level of prices in prospect for most types of livestock and livestock products compared with a year earlier.

Oklahoma.—Oklahoma's short feed production of 1949 (estimated at 11 percent lower than the previous year) is being supplemented by an importation from an ample supply in surrounding states. However, the picture may change in the coming year. Wheat crop failures due to the drouth, and green bug infestations along with acreage allotments, may cause a considerable increase in the number of acres of grain sorghums planted this year. If after a dry spring a wet summer follows that is favorable for the production of the combine varieties of grain sorghums, fall would see a large supply being placed on the market.

There are no current statistics on the availability of the combine variety of grain sorghum seed. However, since limited amounts of grain sorghums have been raised the last few years and since there was no indication last fall that a big demand for seed might exist this summer, it is doubtful that enough was saved back to take care of any more than normal requirements. It might be wise, therefore, to place seed orders early.—**Kay V. Billingsley.**

LIVESTOCK AND LIVESTOCK PRODUCTS

Beef Cattle

Receipts of calves at Oklahoma City continue below last year's marketings. During the first three months of this year, 13 percent fewer calves were sold than for the same period last year (Table II).

Cattle receipts were 8 percent above the first quarter's receipts a year ago. Although marketings of cattle and calves dropped off in February from January marketings, March receipts exceeded the January levels.

Prices of meat animals generally were steady through February in contrast with the sharp price breaks that occurred in that month in the two previous years. During March, prices of good slaughter and common feeder and stocker steers at Oklahoma City were slightly below February prices; all other classes and grades were selling a little above February prices.

As compared to September prices, those of the poorer grades of slaughter steers had increased most by March. Common slaughter steers increased 30 percent per hundredweight to $20 per hundred pounds. Medium and good slaughter steers increased 13 and 3 percent per hundred pounds. The March prices averaged $22.50 for medium and $25.75 for good slaughter steers at Oklahoma City.

Price changes since September on feeders and stockers, however, have been abtut the same for the three grades. Good steers sold for $24.00 per hundred pounds; this was 22 percent above their September average price. Medium and common feeder and stocker steers sold for $20.75 and $18, respectively, which was 24 and 22 percent above their September averages.

Prices for the week ending March 31 at Oklahoma City reveal that good slaughter steers were selling for $25.75 per hundredweight. This is 13 percent above the same period a year earlier (Table III). Medium and common slaughter steers ranged from 7 to 8 percent above, and good slaughter calves were selling from 1 percent above to 3 percent below prices for the same week a year ago.

*TABLE II.—Stockyard Receipts of Saleable Cattle and Calves at Oklahoma City for Selected Periods of 1950, with Comparisons.**

Period	1949		1950		Percent Change From 1949	
	cattle	calves	cattle	calves	cattle	calves
	Number				Percent	
January	36,513	4,711	42,250	4,200	+16	−11
February	31,483	3,925	34,850	3,700	+11	− 6
March	46,675	5,839	46,225	4,675	− 1	−20
Total	114,671	14,475	123,325	12,575	+ 8	−13

* Compiled from *Weekly Livestock Market Reviews*, Vol. XXXIII, January 6, 1950-March 31, 1950. United States Department of Agriculture, Production and Marketing Administration, Livestock Branch, Oklahoma City, Oklahoma.

*TABLE III.—Prices Received by Producers for Steers and Calves by Classes and Grades at Oklahoma City, Week Ending March 31, 1950, with Comparisons.**

Item	Grade and Weight (lbs.)	Week Ending		Percent change from 1949
		June 1 1949	March 31 1950	
		Dollars per cwt.		Percent
Slaughter				
Steers:	Gd. 700-900	22.85	25.75	+13
	Med. 700-1100	21.05	22.50	+ 7
	Com. 700-1000	18.60	20.00	+ 8
Calves:	Gd. and Ch. 500 down	24.50	24.75	+ 1
	Com. and Med. 500 down	21.00	20.50	− 2
	Cull, 500 down	17.00	16.50	− 3
Feeder and Stocker				
Steers:	Gd. 500-800	22.65	24.00	+ 6
	Med. 500-1000	19.90	20.75	+ 4
	Com. 500-900	18.40	18.00	− 2
Calves:	Gd. and Ch., 500 down	25.30	25.40	0
	Med. 500 down	21.80	23.00	+ 6

* Compiled from *Weekly Livestock Market Review*, Vols. XXXIII, April 1, 1949 and XXXIII, March 31, 1950, United States Department of Agriculture, Production and Marketing Administration, Livestock Branch, Oklahoma City, Oklahoma.

As with good slaughter steers, the better quality feeders and stockers were also bringing higher prices toward the close of March than for the same period a year earlier. Good feeder and stocker steers averaged $24; this is 6 percent above the level a year ago. Medium and common grades were selling from 4 percent above to 2 percent below last year's levels.

Cattle prices still are very high as compared to prewar levels. The outlook is for year-average prices of all cattle to be slightly below 1949. Top quality cattle are expected to decline most.*—**Robert L. Tontz.**

Dairy

The number of milk cows in the United States on January 1 was 24.6 million head, according to the U. S. Department of Agriculture. The number for January 1, 1949, was 24.4 million head, or about one percent below this year. The value per head on January 1, 1950, was $177 per head. One year ago the value was $193 per head. The 10-year average is $97.40 per head.

The 200,000 increase in milk cow numbers in the United States is accompanied by an increase of 115,000 heifers from one to two years old, and 424,000 head of heifer calves kept for milk cows. These potential producers will make for double and triple percentage increases in milk cow numbers two or three years hence.

* See Steer Prices by Classes and Grades, Oklahoma City, 1940-1950," page 50.

Of the two million increase in the number of all cattle, 747,000 is accredited to the increase in dairy cow and heifer numbers. On January 1, 21.5 percent of "all cattle" were either milk cows or heifers "kept for milk cows". The total is 37.2 million head. Last year these figures totaled 36.4 million head of all ages kept for milk production. This was 21.4 percent of all cattle on farms January 1, 1949.

These figures indicate (1) farms are being stocked for dairy production at a somewhat faster rate than within recent years, (2) the increase is greatest with heifers and calves, and (3) with some drops in beef income the shift to milk production will increase in some areas (this increase will be greatest in the West North Central and South Central states), and (4) shifts are more likely to be on family-sized farms where cattle often are not particularly well-bred for beef production, but are so used when meat prices are high.

The changes in total U. S. cattle population show a 3 per cent increase in number, and indicate a trend toward more total cattle as well as milk cows. How much lower does beef need to go to induce many farmers to shift herds of females from the production of feeders and beef to the production and sale of dairy products? This is a very important question.

An important event in dairy products marketing in Oklahoma during the past 30 days is the federal milk marketing order effective in the Tulsa and Oklahoma City markets on May 1, 1950.

Under the order, minimum prices will be established for dealers to purchase Grade A milk from farmers to be sold in the trade territory of Oklahoma City and Norman. The order also establishes minimum prices paid by dealers for Grade A milk used in the markets at Tulsa, Sapulpa and adjacent territory in Tulsa, Creek and Osage Counties.

Other important provisions include the use and classification payment for milk. Class I milk is milk used chiefly for fluid uses —bottled milk, milk drinks, cream and cream products. Class II milk would include all milk going into manufacturing of dairy products such as butter, cheese, and evaporated milk.

The prices set by the Secretary of Agriculture under his authority from congress (1) reflect feed prices and supplies and other economic conditions which affect the demand and supply of milk (2) insure a sufficient supply of pure and wholesome milk, and (3) are in the public interest. Orders do not regulate the wholesale or retail price of milk.

Government purchases to support dairy prices are increasing over that of one year ago. Butter production is about 6 percent above last years level.

*TABLE IV.—Seasonal Spread in Cents per Pound Between A (90) Score and AA (92) Score Butter at Chicago, 1948 and 1949, by Quarters of Years.**

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Average per Year
1948	.61	2.23	4.18	.62	1.91
1949	.10	1.41	2.26	1.19	1.24

* Grade B(89) score butter, the grade generally produced, is not regularly quoted on the market so it is not used in computing the spreads.

SOURCE: U. S. D. A. reports.

High quality dairy products are more in demand than last year as the CCC price support program is stricter on grades. Table IV indicates the spread which has existed on the Chicago market for 90- and 92-score butter.

Some special emphasis is being stressed by the dairy industry and the American Dairy Association for the increased use of dairy products. The increased sales of 7 billion pounds of milk might remove the need for government purchases of dairy products.—**A. W. Jacob.**

Hogs

Prices of meat animals generally were steady through February in contrast to the sharp breaks that occurred that month in both 1949 and 1948. Prices of hogs have drifted downward the past year and one-half, and they are continuing lower than a year ago despite a slight advance in February.

A seasonal decline in prices is to be expected this spring as hogs from the 1949 fall pig crop come to market. The reduction may be larger than seasonal since the number of hogs slaughtered, which recently has been about equal to last year, will exceed 1949 from April to mid-June. Increased slaughter in those months will reflect the larger number of pigs saved from August and September than a year previously.

Much of the effect of the increase in the pig crop on pork supplies the past year has been offset by lighter slaughter weights of hogs. This will tend to prevent any great weakness in prices. In the four weeks ended February 25, the average weight of barrows and gilts was 13 pounds less than the 251 pounds of last year. A decline in pork stocks in cold storage to 573,615,000 pounds on March 1 was 73,000,000 pounds above the average, but 37,000,000 pounds less than the same date last year.

Prices of hogs in February and March were above support levels. As late as March 31, the date that support prices expired, no pork has been bought to support prices. The price support guide

at seven markets for March was $16.65 per 100 pounds in each week of the month, and the support price, farm basis, was $16.20.

The U. S. D. A., on March 31, stated that hog price supports would not be in effect for a short period of time due to lack of price support money. The Secretary of Agriculture indicated, however, there will be a support program as soon as Congress provides the money, with the lapse in supports to last only a short time.

The hog-corn price ratio, based on average prices received by farmers, was 13.1 in mid-January, a little above the long-time average, but lower than the very favorable ratio of a year ago. The ratio is expected to continue less favorable during the remainder of the 1949-50 season than in the same period of 1948-49, reflecting the somewhat lower level of prices in prospect compared with a year earlier.—**Raymond Wegener and Howard S. Whitney.**

Poultry

Chickens and Eggs.—The unfavorable egg prices for the last three months have not caused any reduction in poultry number. Neither have low prices for eggs and poultry discouraged plans of poultrymen to continue operating at the present rate of output.

The number of chickens on farms January 1, 1950 has been increased to 405 million, or 6 percent more than a year ago. Oklahoma producers followed the national trend and increased numbers from 10,343 to 11,102 million, or almost 8 percent. The rate of lay of 127 eggs per hen in 1949 established a new high rate and, assuming the same conditions to apply in 1950, egg production should exceed the heavy 1949 production.

Although civilian per capita consumption has increased in the last few years, the present rate of one egg per day, or about 360 eggs a year, leaves a large surplus to depress prices. This means that the government purchase program will be instrumental in supporting prices during the year.

The current hatchery reports indicate that poultry producers are not decreasing operations. Hatchery production in January totaled 83,644,000 chicks compared with 80,899,000 during January of 1949, and 53,266,000 for the 1944-48 January average. The February report estimated hatchery production in February at 139,751,000, or about the same as 1949. The only indication that producers may not plan to continue to purchase chicks at the January-February rate is that on March 1 hatcheries had 23 percent less chicks booked for April delivery. Oklahoma hatcheries did not produce as heavy in January of 1950 as a year ago, but the February production in 1950 exceeded last year's output for the same month.

TABLE V.—Egg Prices Received by Oklahoma Farmers, January 1942 to February 15, 1950.
(Cents per dozen)

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1942	30.2	24.8	25.0	24.4	25.7	27.0	27.0	27.5	29.4	31.4	33.2	34.7	28.4
1943	35.4	33.3	32.9	32.4	32.9	33.3	32.6	32.6	34.3	37.5	39.0	39.6	34.6
1944	32.4	31.6	29.7	26.0	26.7	27.0	28.0	28.5	29.9	32.6	38.6	41.1	31.0
1945	37.5	31.2	30.7	30.8	30.5	31.1	32.3	33.5	30.0	35.0	44.7	45.5	34.4
1946	37.5	29.4	30.1	29.7	30.0	30.0	32.0	32.0	40.0	44.0	41.0	43.0	34.9
1947	38.1	35.1	36.0	37.5	36.5	36.7	38.3	37.4	43.6	47.8	47.7	57.6	41.0
1948	44.3	39.7	38.3	38.3	35.4	36.4	37.0	38.0	41.7	46.0	52.0	53.0	41.6
1949	43.0	40.5	37.9	38.3	38.4	36.7	36.5	38.4	42.4	46.0	46.1	40.9	40.4
1950	28.4	27.6											

SOURCE: "Prices Received by Farmers," Mid-Monthly Release, Agricultural Statistics Division, B.A.E., U.S.D.A., Oklahoma City, Oklahoma.

TABLE VI.—Chicken Prices Received by Oklahoma Farmers, January 1942 to February 15, 1950.
(Cents per pound)

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1942	14.8	15.3	15.8	16.1	16.8	16.8	15.8	16.7	17.9	17.8	17.2	17.7	16.6
1943	19.0	19.8	20.7	22.1	22.1	22.6	22.3	21.7	22.0	22.3	22.5	21.9	21.6
1944	21.9	22.2	22.2	21.4	21.5	21.8	21.8	21.4	22.0	21.4	21.4	22.1	21.8
1945	21.8	22.1	22.5	23.2	24.0	24.7	24.9	25.8	22.8	21.8	20.9	21.4	23.0
1946	21.6	21.6	21.7	22.4	23.5	23.4	25.5	23.4	24.0	27.0	21.9	22.4	23.2
1947	22.4	21.2	23.0	23.8	23.5	22.2	22.0	22.0	22.5	23.4	22.1	21.6	22.5
1949	27.0	27.0	26.0	28.1	24.8	26.0	28.2	25.7	27.0	26.4	25.8	28.0	25.9
1948	22.2	22.4	23.0	24.0	24.0	21.6	20.0	20.4	20.6	19.8	19.9	19.7	22.9
1950	17.3	18.2											

SOURCE: "Prices Received by Farmers," Mid-Monthly Release, Agricultural Statistics Division, B.A.E., U.S.D.A., Oklahoma City, Oklahoma.

TABLE VII.–Poultry Ration Cost Per 100 Pounds, to Oklahoma Farmers, January 1942 to February 15, 1950

(Dollars)

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1942	2.01	2.07	2.13	2.12	2.11	2.11	2.10	2.17	2.16	2.14	2.16	2.20	2.12
1943	2.37	2.39	2.45	2.53	2.60	2.63	2.71	2.77	2.75	2.77	2.82	2.86	2.64
1944	2.91	2.92	2.92	2.95	2.96	2.91	2.88	2.87	2.78	2.71	2.71	2.69	2.85
1945	2.72	2.73	2.76	2.19	2.78	2.80	2.84	2.86	2.85	2.89	2.91	2.94	2.82
1946	2.96	3.02	3.10	3.11	3.35	3.49	3.84	3.81	3.63	3.58	3.63	3.47	3.42
1947	3.39	3.42	3.77	3.85	3.85	3.81	3.94	4.08	4.35	4.42	4.53	4.76	4.01
1948	4.92	4.36	4.47	4.56	4.48	4.34	4.17	3.77	3.51	3.43	3.45	3.53	4.08
1949	3.52	3.41	3.45	3.52	3.45	3.29	3.33	3.32	3.29	3.27	3.25	3.30	3.37
1950	3.29	3.29											

*TABLE VIII.–Egg-Feed Price Ratios, Oklahoma.**

(Pounds of poultry ration** equaul in value to one dozen eggs)

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1942	15.0	12.0	11.7	11.5	12.2	12.8	12.9	12.7	13.6	14.7	15.4	15.8	13.3
1943	14.9	13.9	13.4	12.8	12.7	12.7	12.0	11.8	12.5	13.5	13.8	13.8	13.2
1944	11.1	10.8	10.2	8.8	9.0	9.3	9.7	9.9	10.8	12.0	14.2	15.3	10.9
1945	13.8	11.4	11.1	11.0	11.0	11.1	11.4	11.7	10.5	12.1	15.4	15.5	12.2
1946	12.7	9.7	9.7	9.5	9.0	8.6	8.3	8.4	11.0	12.3	11.3	12.4	10.2
1947	11.2	10.3	9.5	9.7	9.5	9.6	9.7	9.2	10.0	10.8	10.5	12.1	10.2
1948	9.0	9.1	8.6	8.4	7.9	8.4	8.9	10.1	11.9	13.4	15.1	15.0	10.0
1949	12.2	11.9	11.0	10.9	11.1	11.2	11.0	11.6	12.9	14.1	14.2	12.4	12.0
1950	8.6	8.4											

SOURCE: "Prices Received by Farmers," Mid-Monthly Release, Agricultural Statistics Division, B.A.E., U.S.D.A., Oklahoma City, Oklahoma.

* These ratios are not indicative of and must never be interpreted as "cost of production." They include only cost of feed, and all other costs of production are in addition.

** Poultry feed ration: percentages of specified feeds include commercial mash, 52.7 percent; home mixed mash, 11.2; commercial scratch, 4.0; corn, 14.0; wheat, 16.3; oats, 9.9; barley, 1.3; sorghum grain, 10.6 percent. Individual producers' ration cost may be more or less than the above stated costs as estimated by the Bureau of Agricultural Economics. In case poultry-ration cost and egg prices for producers in any community differ from those shown in Table VII and Table V, respectively, the actual ratios can be calculated by dividing egg prices per dozen by actual feed cost per pound.

Turkeys.—Turkey producers are planning to produce 41,894,000 birds in 1950 compared with 41,470,000 in 1949.

Oklahoma producers intend to expand turkey output to 479,000 birds compared with 456,000 in 1949. Reasons given for increasing numbers in 1950 are favorable prices, and expectations of an abundant feed supply.

All indications are that producers plan to expand poultry operations, including turkeys, despite the fact that present low price and price relationships are likely to continue throughout the year.—**—K. C. Davis.**

Sheep, Lambs and Wool

Sheep and Lambs.—The number of sheep and lambs on farms is down to 30.8 million head, according to the Department of Agriculture.* This is 3 percent below the figure for last year, 45 percent below the 1945 high, and a new low for sheep numbers on farms in the United States.

Although the decline in sheep numbers has continued for several years at a rather rapid rate, the decline is slower this year when compared with the years since 1945. According to some reports, it is expected that stock sheep herds will be more nearly maintained, or perhaps expanded, during the coming year. If sheep herds are expanded to any appreciable degree, the number of sheep and lambs slaughtered could, quantity wise, actually be less in the months ahead as compared with the recent past. Sheep and lamb prices then would tend to be favorable to strong relative to other meat animal prices, providing no major shift in demand occurred which, in view of the present market and low level of sheep production, seems unlikely.

The early spring lamb crop is estimated to be about 2 percent higher than that of a year ago, and it is the first increase shown in an an early lamb crop during the past 9 years. However, this larger crop can be partially explained in terms of a greater proportion of ewes lambing before March 1, especially in Missouri and the southeastern states, rather than in an increase in the number of ewes lambing.

On the whole, early lambs are reported to be making good progress as of April 1, with marketings before July 1 expected to be considerably larger than last year, and with a relatively smaller proportion of this year's crop marketed as feeders.

Wool.—The average prices received by farmers for wool and the market price for fine apparel wool likely will continue strong during 1950. Prices received by farmers will tend to be influenced by the new higher parity price effective January 1 this year. Market prices for

* "The Livestock and Meat Situation," USDA, BAE, Washington, D. C., March 1950.

apparel wool probably will reflect the scarcity of this type relative to a continuing strong civilian demand and strengthened by an increase in procurement by the military element in world markets.—**Raymond B. Marshall and Lanny Gallup.**

Efficient Management and Green Bug Infestation

Oklahoma farmers in the small grain section are confronted with one of the heaviest infestations of green bugs in 10 years. As the infestation began to develop in the fall of 1949, and then became a real threat to farmers in the spring of 1950, it was evident that most of the precautionary measures adopted in previous years had been relaxed or completely ignored by many operators.

"In Oklahoma, the insects occur in the fields from November through May of the following year. When conditions become favorable for their development, a general infestation of the insects occurs. It is also true that because of the migratory habits of this insect, local conditions may have little bearing upon the beginning of the infestation which may depend upon the weather some distance away. Where an area is suffering from lack of moisture, conditions are favorable for severe green bug damage."*

Climatic conditions were very favorable for development of the insects last fall, and continued favorable throughout the winter and spring. With no temperatures of less than five degrees below zero during the winter months, a relatively large percentage of the insects lived through the winter and as soon as temperatures reached 40 degrees, new generations began to appear.

Relationship Patterns in Green Bug Infestation

The following observations made throughout the fall, winter and early spring seem to indicate definite relationship patterns in the green bug infestation:

Green bugs began to appear in areas and fields in the fall where there was a lack of moisture.

A heavy early fall infestation seemed to occur most frequently in fields where volunteer wheat or oats were growing.

The insect damage first became noticeable in areas where the soil showed indications of plant food deficiency.

Within the framework of these general relationships, further observations were made to relate green bug infestation, and eventually

* Okla. Exp. Sta. Bul. B-275, January 1944.

the damage done, with the farming and management practices followed on different farms in type of farming area 3 (Cash Grain, General Farming, Dairy and Poultry). The ultimate reduction in yield because of green bug infestation cannot be measured at this time, and no experience is available to enable observers to make reliable estimates of the damage. However, it is evident now that some individual fields are showing a greater effect of insect infestation than adjacent fields, or fields in the same vicinity.

Further investigation revealed that many of these fields showing indications of heavy infestation had considerable areas of thin soil. On these spots, the plants showed the insect damage very quickly. However, not all infestation appeared first on the thin land. Fields in which volunteer wheat was evident generally were more heavily infested in the early season. Other fields showed heavy infestation very early in the season where the wheat made little growth. Inquiries revealed that these fields were seeded late or that they had the minimum seed-bed preparation. Thus these observations raise many questions which can only be answered by further investigation.

It is evident that insufficient moisture for plant growth is an uncontrollable factor in wheat production, but within a homogeneous area there were fields that gave indications of still having sufficient moisture. The similarity of soil characteristics eliminated soil as the factor.

Moisture Retained in Adequately Prepared Seed-bed

Additional inquiries established the fact that the seed-bed in the field showing relatively little damage had been adequately prepared, thus retaining the moisture that had fallen earlier in the season. The plants did not always make the same amount of growth on the field receiving identical treatment, and it became necessary to make additional inquiry. Although the fields received the same treatment in seed-bed preparation, there had been a time element involved that was to the advantage of the superior field. Large operations prevented the operators from plowing, one-waying, and spring-toothing each field at the most advantageous time.

Fields were observed, however, which were not showing as much damage from insect infestation as some other fields but still had not had adequate seed-bed preparation. It was discovered in these instances that commercial fertilizer had been applied. Further checking revealed that all fields receiving commercial fertilizer were showing less damage from greenbug infestation than those receiving no fertilizer, although the seed-bed preparation had been almost identical to the fertilized fields. There are, of course, exceptions to all cases, but there appears to have developed a pattern of resistance to infestation

that raises questions warranting additional investigation. Results of such investigations, if applicable, could help lessen the green bug damage.

The efficient farm manager is continually searching for weaknesses in the farm organization and management that affect farm returns. If adequate seed-bed preparation requires more timely and thorough preparations, it may be that extensive operations will no longer give the greatest returns as has been true for the past 10 years. Extensive operations can prove very unprofitable when yield per acre is reduced materially. The minimum of land preparation will cost about $6 at present prices, whereas an adequately prepared seed-bed plus fertilizer will not exceed $10 per acre. It seems advisable, therefore, to keep these questions in mind and study their influence on the farm income.—**K. C. Davis.**

Steer Prices By Classes and Grades, Oklahoma City, 1940-1950

Price changes of beef cattle are of importance to producers in planning their production and timing their sales for maximum profits.

In order to appraise recent price changes as a possible guide for determining future price developments, the following analysis of trend and seasonal prices of good, medium, and common slaughter and feeder and stocker steers at the Oklahoma City market, January, 1940-March, 1950, is presented.

TREND CHANGES

Slaughter Steers

In June, 1948, medium slaughter steers at Oklahoma City sold for $27.10 per hundredweight. Common grade steers brought $22.40 per hundred pounds (Figure 1). These prices represent the peak levels of a rising price trend during the 15 years following 1933.

Since June, 1948, prices have followed a downward trend. Prices received by producers for medium slaughter steers during May, the high month of 1949, were 17 percent below the peak of $27.10 received in June of the previous year. As compared to May, 1940, the 1949 prices for medium and common steers remained over two and one-half times as high.

Price estimates were not summarized for good grade slaughter steers for October, 1946-October, 1948, because insufficient receipts during these postwar years prevented a reliable test.

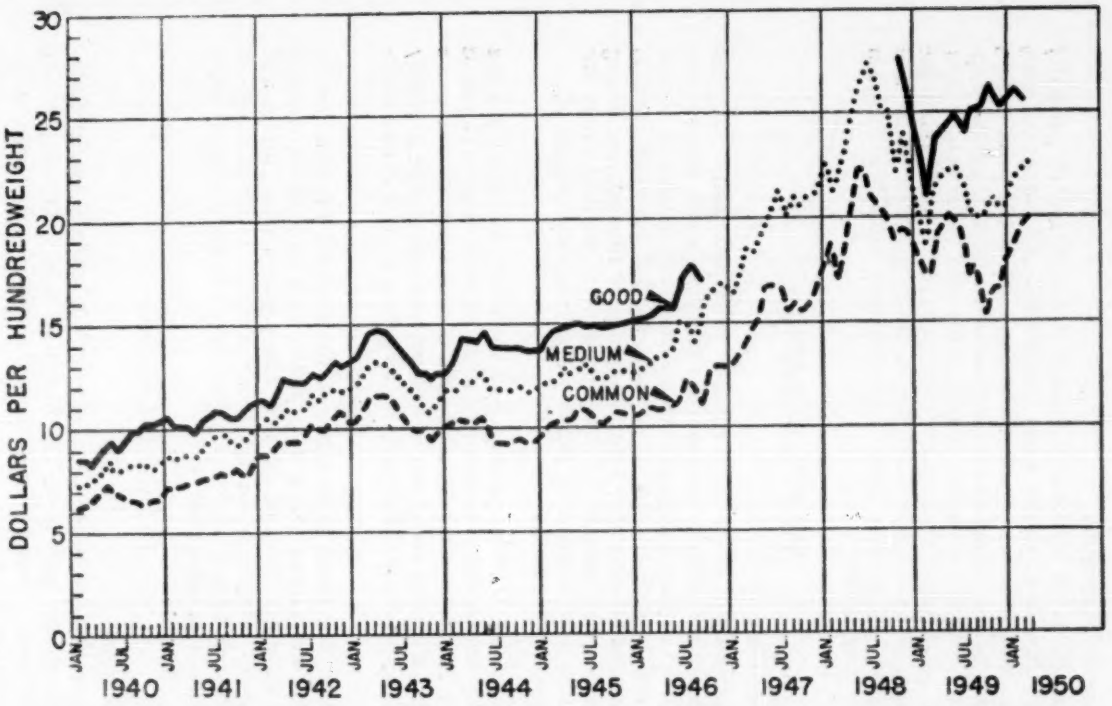

Fig. 1.—Average monthly prices received by farmers for 700-1100-pound good, medium, and common slaughter steers at Oklahoma City, January 1940-March 1950. Sources: Compiled from **Daily Livestock Market Reports,** Department of Agriculture, Oklahoma City, Okla. (Prior to February 12, 1949, the daily quoted range for each January 1940-February 11, 1949, and **Weekly Livestock Market Reviews,** February 18, 1949-March 1950, United States of the grades for one day each week were averaged; follo wing this date the weekly prices were summarized for the monthly quotations.)

Feeder and Stocker Steers

Price trends for feeder and stocker steers have been generally similar to those of slaughter steers (Figure 2). Of particular note, too, is the fact that in addition to the similarity of the price trends, the actual prices of feeder and stocker steers frequently have been approximately equal to slaughter steeers of the next lower grade. For example, good feeder and stocker steer prices have been about the same as medium slaughter steer prices, while medium feeder and stocker steer prices have been approximately equal to common slaughter steer prices.

SEASONAL CHANGES

Slaughter Steers

A summary of the average seasonal price pattern for slaughter steers, 1940-1949, reveals that medium slaughter steers brought the highest prices in June and July. Common slaughter steers sold highest in May and June. Following these peaks, average prices declined to September and October after which a slight price rise occurred during the remaining two months of the year. Lowest seasonal prices for these grades were received in January and February (Figure 3).

Feeder and Stocker Steers

The average seasonal price pattern for feeder and stocker steers was closely similar to the seasonal price changes for slaughter animals (Figure 4). Highest prices for all grades of feeder and stocker steers were received in May and June. Lowest seasonal prices were generally obtained in January and February for all grades of feeders and stockers.

As with the trend price changes, the seasonal prices of feeder and stocker steers frequently were approximately equal to the seasonal prices of slaughter steers of the next lower grade. Good feeder and stocker steers brought about the same prices as medium slaughter steers, while medium feeder and stocker steers brought slightly more than common slaughter steers.

INTERPRETATIONS

Trend Changes

Despite the downward trend since 1948, cattle prices at Oklahoma City remain quite high. The March price of medium slaughter steers was above a year earlier by a small extent. As compared to the March price for the peak year of 1948, March, 1950, prices of medium slaughter steers were only slightly lower. This condition is also characteristic of the other grades of slaughter and feeder and stocker steers with the exception of common feeders and stocker which are slightly above the March, 1948, price.

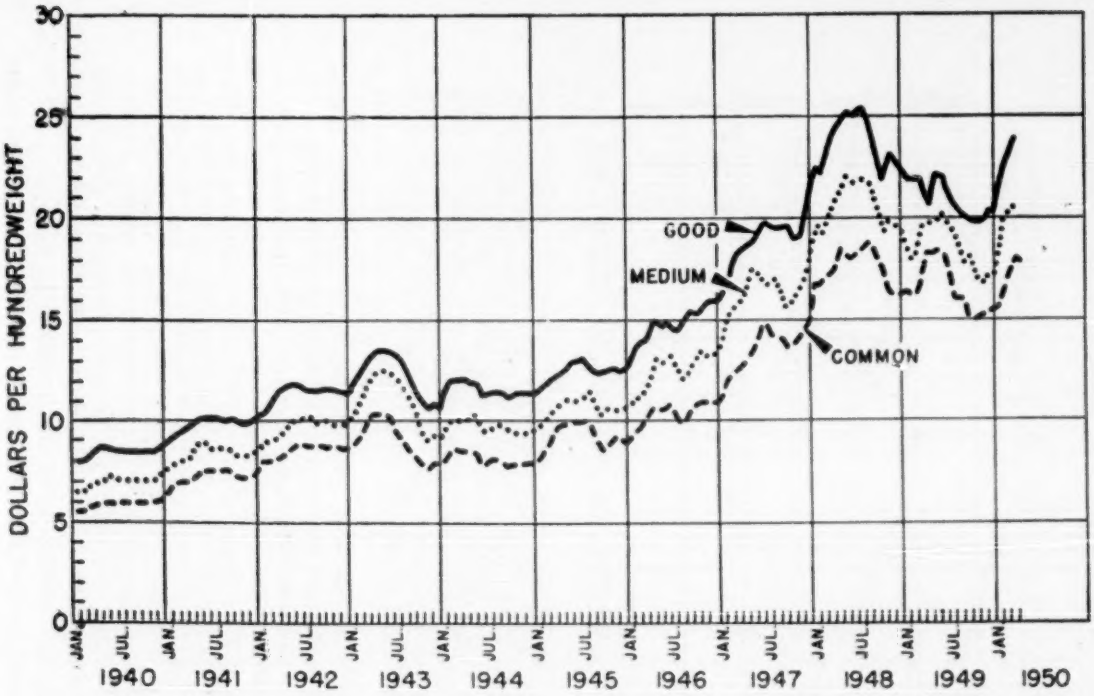

Fig. 2.—Average monthly prices received by farmers for 500-1050-pound good, 500-1000-pound medium and 500-900-pound common feeder and stocker steers at Oklahoma City, January 1940-March 1950. Sources: Compiled from **Daily Livestock Market Reports,** January 1940 February 11, 1949, and **Weekly Livestock Market Reviews,** February 18, 1949-March 1950, United States Department of Agriculture, Oklahoma City, Okla. (Prior to February 12, 1940, the daily quoted range for each of the grades for one day each week averaged; following this date the weekly prices were summarized for the monthly quotations.)

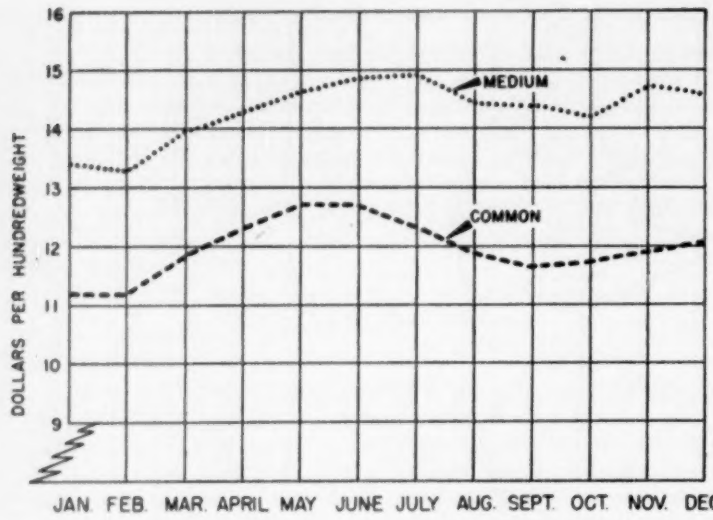

Fig. 3.—Average seasonal prices received by farmers for 700-1100-pound medium and common slaughter steers at Oklahoma City, 1940-1949. Sources: Compiled from **Daily Livestock Market Reports,** January 1940-February 11, 1949, and **Weekly Livestock Market Reviews,** February 18, 1949-March 1950, United States Department of Agriculture, Oklahoma City, Okla. (Prior to February 12, 1949, the daily quoted range for each of the grades for one day each week were averaged; following this date the weekly prices were summarized for the monthly quotations.)

Changes in beef cattle prices from year to year are brought about by changes in demand and supply of beef and other meats.

The demand for beef is reflected by such indicators as consumer income and the general price level. Levels of employment and wage rates are important consumer income determinants. The Bureau of Agricultural Economics indicates that the overall prices of meat animals and meat have been lower and, as a result, it is evident that demand has weakened somewhat. Consumers' incomes have slackened off since last winter and, in addition, the retail value of meat consumed is a little lower relative to incomes. In view of a slightly weaker demand for meat, the outlook is for year-average prices of cattle slightly below 1949.

Along with demand changes, consideration must be given to meat supply changes in analyzing the prices of beef. Cyclical movements in United States cattle numbers have averaged about 15 years in length; however, there has been much variation from the average in the length of specific cycles. Cyclical movements in numbers have followed the cyclical movements in beef values by four or five years, inasmuch

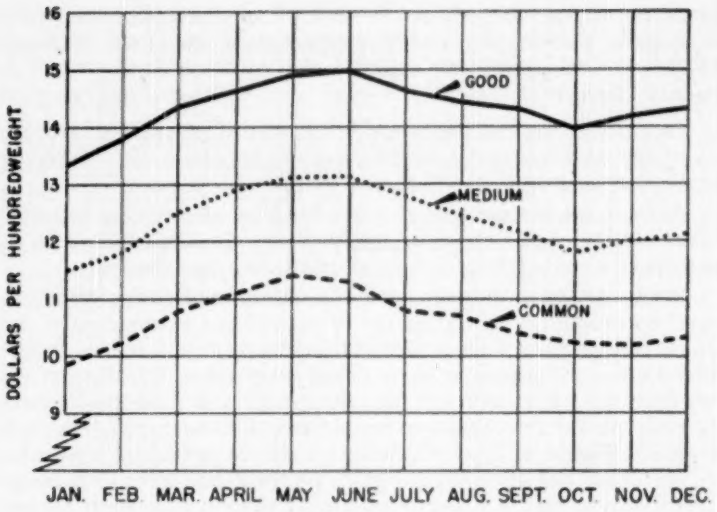

Fig. 4.—Average seasonal prices received by farmers for 500-1050-pound good, 500-1000-pound medium, and 500-900-pound common feeder and stocker steers at Oklahoma City, 1940-1949. Sources: Compiled from **Daily Livestock Market Reports**, January 1940-February 11, 1949, and **Weekly Livestock Market Reviews,** February 18, 1949-March 1950, United States Department of Agriculture, Oklahoma City, Okla. (Prior to February 12, 1949, the daily quoted range for each of the grades for one day each week were averaged; following this date weekly prices were summarized for the monthly quotations.)

as it takes this long to increase or reduce herds; in addition, there is a lag of approximately two years between numbers on farms and numbers slaughtered*.

On January 1, 1950, there were 80.3 million head of cattle in the United States. This is 2.2 million higher than the 1948 low and above any year prior to 1943. In addition, further building up of herds is expected. Rising numbers will eventually result in an expanding cattle and calf slaughter. Estimates by the Bureau of Agricultural Economics place this period as "probably beginning in 1951."

The withholding of heifer calves for herd building is also evidenced by receipts at the Oklahoma City market. During 1949, 25 percent fewer calves were marketed than in 1948.

In terms of meat consumption per capita, American consumers are expected to have a 10 percent larger output of pork and as large

* Shepherd, Geoffrey S., *Agricultural Price Analysis*, The Iowa State College Press, Ames, Iowa, 1941. p. 65.

a quantity of beef in 1950 as in 1949. As a result, the total meat consumption per person for 1950 is expected to exceed the 1949 consumption of 146 pounds per capita.

Seasonal Changes

In addition to the long-time influences of changes in demand and supply, seasonal demand and supply changes are also of importance in determining the level of beef prices.

As with the annual changes, assuming no variation in consumer purchasing power and demand, supply changes resulting from seasonal marketings often exert pronounced price rises and declines.

While seasonal supplies are influential in affecting prices received by producers, the reliability of an average seasonal price pattern is not high. The average seasonal price patterns shown in Figures 3 and 4 are based primarily upon rising price trends. The lack of representativeness of an average May-June high and January-February low price period for slaughter steers for individual years is seen by examining Figure 1. Figure 2 indicates the same lack of representativeness of an average seasonal price pattern for feeder and stocker steers shown in Figure 4. Furthermore, an analysis of average seasonal variation in prices received by farmers for cattle in Oklahoma, 1911-1941, reveals that the average patterns of seasonal variations were not duplicated in any particular year.*

Seasonal marketings can easily change from an established pattern. For example, in the event a pronounced drouth occurred, seasonal marketings might increase rapidly in a relatively short time; as a result, excess supplies would be price depressing unless, of course, demand were so strong as to prevent this price-dampening effect.

Seasonal declines in prices of finished cattle usually begin in the fall when such cattle are customarily marketed in greater quantities. In 1949, however, such a seasonal price decline was delayed because of the relatively small marketings of cattle of the top grades. As more cattle with high finish reach slaughter channels in the next few months, their prices are likely to decline. Extreme price drops are not expected, however, because marketings of fed cattle are likely to increase rather gradually and reach a peak later this year than last.—**Robert L. Tontz and Kenneth L. Hobson.**

Who Owns the Mineral Rights in Oilfields?

When oil is discovered in an area, who gets the oil income? Seven-eighths of the oil goes to the oil companies who produce it

* Blakely, Leo. V., *An Analysis of the Annual and Seasonal Movements of Beef Cattle Prices*, unpublished Master of Science Thesis, Oklahoma Agricultural and Mechanical College, 1947, p. 108

as reimbursement for their costs. This division has become well established and most people agree that the division is fair. Who gets the other one-eighth? Do farmers get it; or, as many believe, have most farmers sold their rights to someone else?

In order to answer these and other questions, a study was made* of four oilfields of central Oklahoma to determine two things: (1) What is the distribution of mineral rights in several producing fields and, therefore, the proportion of the oil income accruing to farmers as owners of producing royalty? (2) How does the amount received for mineral rights *sold* compare with the amount received from mineral rights *retained?*

Ownership of Mineral Rights

Fewer than one-fourth of the landowners in the four fields owned all the mineral rights under their farms. About 15 percent —one out of seven—of the landowners owned none of the mineral rights. Landowners owning less than half of the mineral rights were about equal in number to those owning half or more of the mineral rights under their farms.

Mineral rights owned separately were largely in the hands of speculators, but about 11 percent were owned by a group classed as quasi-speculators.** The average for the four fields showed that about 49 percent of the mineral rights were owned by the present landowners, 11 percent by former owners of tracts in the field, and about 40 percent owned by speculators. More than half of all sales of royalty by landowners occurred either during the year of discovery of the first well in the vicinity or the year following.

Income to Landowners From Producing Royalty

Lacy's study shows that up to the end of 1947, the landowners' share of the oil produced from the four fields amounted to $704.50 for each acre they still owned. Based on the oil industry's estimated reserves in the fields; calculations show that the average value of production from each acre in the fields will be a minimum of $863.25. The records do not show any landowner selling his mineral rights for more than $700 per acre. The average price received for royalty sold was $185 per acre which was, of course, a lump sum. The oil income of $704.50 was received over a period of years, averaging $47 per acre annually.

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* Robert L. Lacy, *Ownership Distribution and Value of Mineral Rights in Producing Oil Fields of Oklahoma*, Master's thesis, Oklahoma A. & M. College, 1949. The fields studied were: The Lucien, the Davenport, the Covle, and the Crescent. While the information contained here is specifically applicable to the four fields mentioned, it is believed that a general application can be made to most oil fields of Oklahoma outside of the Indian lands of the eastern part of the state.

** Former owners of farms in the fields who had retained a part or all the mineral rights when they sold the land were classed as quasi-speculators.

Considering the fact that a lump sum payment is worth more than a deferred payment, the oil income was discounted in order to show its value at the time the mineral rights were sold by the farmer. Discounted at 5 percent annually, the average royalty acre had a value at the time of sale of $487.50. This property right was sold for an average of $185.

It should be kept in mind, however, that the value of the royalty was wholly unknown at the time of sale and that the farmer sold an unknown future income for a known amount. While subsequent events show that he made an unwise choice, at the time of sale this could not be foreseen. Moreover, the uncertainty of any oil income at all was partially transferred to someone else at the time of sale. It is not possible to measure the degree of uncertainty, but if it be assumed that the odds are as great as the ratio of dry holes to producing wells in new or "wildcat" territory, then the chances for discovery on the property were about one in five.* If the odds were that great, then the value of the mineral rights at that time might well be reduced by as much as 80 percent because of this uncertainty.

It is recognized that such assumptions are purely theoretical and, since the majority of farmers sold their mineral rights after the first producing well was drilled in the area, their farms were no longer in a strictly "wildcat" area. For these farmers the risk factor should be considerably less. Lacy assumed a risk factor of 50 percent—in other words, the chances were assumed to be a 50-50 that a producer would be found on a particular tract in the neighborhood of the first well in the field. Under this assumption, the value per acre at time of sale was reduced to $243.75, which is half of $487.50. This latter figure probably is as representative of the actual value of a majority of the mineral rights at time of sale as can be arrived at with presently available data. It appears, then, that farmers in general sold mineral rights at too low a figure by selling at an average of $185 per acre. Moreover, the fields continue to produce, and each year's production adds to the difference between the two figures.

Another factor to be considered is economic conditions at the time of sale of the mineral rights. Sale of part of these rights may have meant the difference between retaining ownership of the unit with a portion of the minerals, or losing the entire farm. Two of the fields studied were discovered during a time of farm distress,** and loss of land through foreclosure of mortgages or forced sales was common. While farm conditions were somewhat better when

* This was the ratio for the two years, 1941 and 1942.

** The Davenport field was discovered in 1924; the Lucien field in 1932; the Crescent field in 1933; and the Coyle field in 1938.

the other two fields were discovered, forced sales were not uncommon.

Conclusions that may be drawn from the study are:

1. Landowners as a group do not receive more than half the royalty income in producing oil fields of western Oklahoma.

2. It would have been more profitable for landowners *as a group* to have retained all their mineral rights, and thus receive all the royalty income than to have sold for a cash figure after the first well was discovered in the vicinity. However, the sale may have been justifiable, at least in individual cases, in view of the uncertainty of economic conditions.

3. In general, landowners have little reliable information upon which to base their subsurface transactions. Certainly, there are many instances in which a landowner would be wise to sell some of his royalty to a speculator since by doing so he allows someone else to bear a part of the uncertainty that oil will be found under his tract.—*L. A. Parcher.*

Prices received by Farmers, Price Indexes, and Indexes of Purchasing Power of Oklahoma Farm Products
(1910-1914=100)

	Prices					Price Indexes					Purchasing Power Indexes [1]				
	1949		1950			1949		1950			1949		1950		
	Mar.	Dec.	Jan.	Feb.	Mar.	Mar.	Dec.	Jan.	Feb.	Mar.	Mar.	Dec.	Jan.[4]	Feb.[4]	Mar.[4]
	(Dollars)					(Percent)					(Percent)				
Grain						225	216	217	220	226	87	86	87	88	90
Wheat (bu.)	2.00	1.97	1.96	1.98	2.03	233	229	228	230	236	90	91	91	92	94
Corn (bu.)	1.34	1.15	1.21	1.24	1.27	206	177	186	191	195	80	71	74	76	78
Oats (bu.)	.86	.77	.81	.84	.86	191	171	180	187	191	74	68	72	75	76
Barley (bu.)	1.22	1.11	1.12	1.13	1.13	207	188	190	192	192	80	75	76	77	76
Rye (bu.)	1.25	1.18	1.17	1.17	1.08	145	137	136	136	125	56	55	54	54	50
Grain Sorghums (bu.)	1.20	1.01	1.08	1.08	1.13	176	149	159	159	166	68	59	64	64	66
Cotton and Cottonseed						258	225	226	229	237	100	90	90	92	94
Cottonlint (lb.)	.285	.256	.256	.260	.270	252	227	227	230	239	98	90	91	92	95
Cottonseed (ton)	60.00	42.00	43.00	43.50	42.50	307	215	220	222	217	119	86	88	89	86
Miscellaneous Crops						179	182	187	183	177	69	73	75	73	71
Potatoes, white (bu.)	1.90	1.65	1.75	1.70	1.80	171	149	158	153	162	66	59	63	61	65
Potatoes, sweet (bu.)	2.90	2.35	2.50	2.60	2.45	236	191	203	211	199	91	76	81	84	79
Hay, all loose (ton)	14.50[2]	17.40[3]	17.40[3]	16.70[3]	15.70[3]	164[2]	197[3]	197[3]	189[3]	178[3]	64[2]	78[3]	79[3]	76[7]	71[3]
Total Crops						244	221	222	225	231	95	88	89	90	92
Meat Animals						371	335	340	360	366	144	133	136	144	146
Cattle (cwt.)	19.60	18.50	18.80	19.80	2.20	406	383	389	410	418	157	153	156	164	167
Calves (cwt.)	22.40	20.50	21.50	22.40	23.10	375	343	360	375	387	145	137	144	150	154
Sheep (cwt.)	9.60	8.70	9.00	10.40	10.40	208	189	195	224	224	81	75	78	90	89
Lambs (cwt.)	23.40	20.80	21.20	23.00	24.10	401	357	364	395	414	155	142	146	158	165
Hogs (cwt.)	20.10	15.10	15.20	16.40	16.50	286	214	216	233	232	111	85	86	93	92

Prices and Indexes, Cont'd.

	Prices					Price Indexes					Purchasing Power Indexes[1]				
	1949		1950			1949		1950			1949		1950		
	Mar.	Dec.	Jan.	Feb.	Mar.	Mar.	Dec.	Jan.	Feb.	Mar.	Mar.	Dec.	Jan.[4]	Feb.[4]	Mar.[4]
	(Dollars)					(Percent)					(Percent)				
Dairy Products						246	240	237	235	232	95	96	95	94	92
Milk, wholesale (cwt.)	4.40	4.40	4.35	4.10	3.90	228	228	225	212	202	88	91	90	85	80
Butter (lb.)	.65	.64	.64	.63	.63	290	286	286	281	281	112	114	114	112	112
Butterfat (lb.)	.58	.56	.55	.56	.56	248	239	235	239	239	96	95	94	96	95
Chickens and eggs						231	224	166	165	170	90	89	66	66	68
Chickens (lb.)	.262	.197	.173	.182	.195	279	210	184	194	207	108	84	74	78	82
Eggs (doz.)	.379	.409	.284	.276	.278	213	230	160	155	156	83	92	64	62	62
Total livestock and Livestock Products						319	295	286	298	301	124	118	114	119	120
All Commodities						266	243	241	246	252	103	97	96	98	100

SOURCE: Compiled by Dept. Agri. Econ., Oklahoma A. and M. College, from data supplied by Bureau of Agricultural Economics, U.S.D.A., Oklahoma City, Oklahoma, and Washington, D. C.

For previous years, see Oklahoma Agri. Exp. Sta. Bul. 258, *Oklahoma Farm Price Statistics*, and *Current Farm Economics*, Okla. Expt. Sta. Series 49, Vol. 15, Nos. 1 and 2, Feb.-Apr., 1940. Tables 16-19, and subsequent issues.

[1] The ratio of prices received by farmers to prices paid by farmers for commodities used in living and production.

[2] Loose. The comparable price per ton baled would be $20.50.

[3] Baled.

[4] The revised Indexes which were expected to be ready for this issue have not yet been compiled.

Price Indexes in the United States and Oklahoma and Indicators of Changes in Domestic Demand.

Year and Month	PRICE INDEXES Average 1910-14=100					INDICATORS OF CHANGES IN DOMESTIC DEMAND	
	Index of Prices Received by Farmers		Index of Prices Paid by Farmers	All-Commodity Index of Wholesale Prices	Oklahoma Hog-Corn Price Ratio[2]	Index of Demand Deposits Oklahoma[3]	Index of Factory Payrolls[4] [7]
	Oklahoma[1]	United States	United States	United States		1923-25=100	1939=100
1910	108	102	98	103	14.43		
1911	98	95	101	95	9.17		
1912	96	100	100	101	11.15		
1913	101	101	101	102	11.21		
1914	97	101	100	99	10.55		
1915	100	98	105	102	10.48		
1916	125	118	124	125	10.61		
1917	193	175	149	172	9.52		
1918	226	202	176	192	9.20		
1919	236	213	202	202	11.14		
1920	221	211	201	225	12.55		
1921	109	125	152	142	17.95		
1922	130	132	149	141	13.39		
1923	161	142	152	147	7.44	97.0[5]	
1924	165	143	152	143	7.26	95.8	
1925	164	156	157	151	11.05	106.5	
1926	134	145	155	146	16.44	102.0	
1927	134	139	153	139	14.54	100.5	
1928	151	149	155	141	10.72	100.3	
1929	145	146	153	139	10.65	92.3	
1930	112	126	145	126	11.04	77.4	
1940	92	98	123	114	8.61	92.0[6]	113.6
1941	117	122	130	127	13.77	86.6	164.9
1942	152	157	152	144	14.35	107.4	241.5
1943	172	188	167	150	11.69	162.3	331.1
1944	181	195	176	152	10.56	215.9	343.7
1945	184	202	181	154	11.95	285.3	293.5
1946	226	233	203	177[7]	11.56	335.3	271.1
1947	286	278	246	222[7]	13.34	348.5	326.9
1948	293	287	264	241	12.69	353.3	351.4
1949	257	251	253	226	15.00	347.4	----
1949 Nov.	246	237[7]	250[7]	221	14.45	349.1	313.9
Dec.	243	233[7]	251	221[7]	13.13	353.0	330.1
1950 Jan.	241	235	250	220	12.56	356.6	329.7
Feb.	246	237	250	223	13.22	353.6	----
Mar.	252	237	251	222	12.83	----	----

SOURCES: Indexes of Oklahoma prices received by farmers, computed by Dept. Agri. Econ., Okla. Agri. Exp. Sta., Stillwater, Oklahoma. Indexes of U. S. prices received and prices paid by farmers and indexes of U. S. wholesale prices, from *Agricultural Prices*, Bur. of Agri. Econ., U. S. D. A., Washington, D. C. Indexes of demand deposits in Oklahoma, calculated by Dept. Agri. Econ., Okla. Agri. Exp. Sta., from data furnished by Federal Reserve Board, Washington, D. C. Indexes of factory payrolls, from U. S. Department of Labor, Bureau of Labor Statistics, Washington, D. C.

[1] Prices received by Oklahoma farmers for 25 commodities. Revised, 1910-1939, in January, 1940.

[2] These figures indicate the number of bushels of corn that could be purchased with 100 pounds of live hogs at current Oklahoma prices received by farmers.

[3] Demand deposits of Oklahoma member banks of the Federal Reserve System located in places under 15,000 population.

[4] Unadjusted for seasonal variation.

[5] Nine months only. Not available prior to April 1923.

[6] Index numbers based on net demand deposits prior to 1936 and upon gross demand deposits since that date. For a discussion of this index see CURRENT FARM ECONOMICS, Oklahoma Agricultural Experiment Station Series 49, Vol. 13, Nos. 1 and 2. Feb.-Apr. 1940. p. 41.

[7] Revised.